



Open Educational Resources; The Need for Formal Inclusion in Compulsory Education

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Abstract

Open Educational Resources: the term coined for digital learning resources at UNESCO's 2002 Forum on Open Courseware, can offer an equitable education to many [1,2]. However, OERs have not been exploited to their full potential in many countries. This lack of uptake could be attributed to a lack of policy by education departments. Policy is critical if open education is to be realistically supported and promoted [3]. During 2020 and 2021 as the COVID-19 pandemic forced the physical closure of schools all over the world many stakeholders in education, including teachers and private companies, supported emergency remote teaching and learning online through sharing their recommendations and opening access to their resources. In Ireland the digital repository Scoilnet compiled a list to highlight the Open access resources available and also requested that teachers make recommendations and upload such resources to the Scoilnet portal.

In order to comply with European legislation passed in 2019, public sector organizations and private companies and organizations need to check the access ability of their websites, mobile apps, and media content. The publishing sector must also adhere to these common Accessibility standards ensuring that digital content can be used by all. High-quality digital materials need to be designed and developed and this requires professional time and resources we cannot expect this to happen without cost this short paper looks at examples where governments have successfully supported open education with a clear strategy [4, 5]. The paper also explores how Open Educational Resources could be promoted at the stage of initial teacher education.

Keywords: *Open Educational Resources, United Nations Sustainability Goals.*

1. Introduction

This short paper will discuss Open Education within the context of the UN Sustainable Development Goal 4 and will look at why policy is critical to the success of Open Education. Before we can consider Open Educational Resources we must look at the impact of technology in education on student progression and learning outcomes. At both international and national levels Open Education contributes directly to key system objectives by improving the quality of the learning environment. Open Education can also support international and national priority around student progression. One of the UN sustainability goals is– Quality Education. This goal aims to ensure inclusive and equitable quality education and to promote lifelong learning opportunities for all. Since 2012 there is a growing body of work advocating the use of Open Education and Open Educational Resources to enhance teaching and learning across all sectors of education; primary second level and third level. The role of open educational resources in the development and improvement of teaching skills is also growing. However, there are still barriers preventing teachers from integrating Open Educational Resources into their classroom. One possible solution to overcoming these barriers is raising awareness of ICT and recognizing the potential of open educational resource is either by placing an emphasis on them during accredited initial teacher education programs or through continuing professional development programs aimed at existing teachers [5]. Both international repositories such as Jorum and Merlot and national repositories such as Scoilnet in Ireland offer educators free access to high quality teaching resources which have been designed and developed by educators for educators. It is because these resources are created in this manner that we can trust these resources. These open educational resources are primarily pedagogically driven and not driven solely by the available technology the majority of these open educational resources in these repositories are also shared under an open Creative Commons license which allows equitable access to all



2. Why Policy is critical to the success of Open Educational Resources

In 2019 Atenas et al [6] stated that we were witnessing a shift from analogue to digital across both content and practice - a shift which enables, though certainly does not guarantee, a parallel move from closed to open. The philosophy of the Open Education (OE) movement is based on the idea that “knowledge is a public good which should reside in the public domain, for everyone to share, use, and reuse” [7]. Policy is critical open education must be realistically supported and promoted at both a national and local level. In early 2009 the Dutch Minister of Education launched the Wikiwijs project, <https://www.wikiwijs.nl>, an open, internet-based platform, where teachers could find, download, (further) develop and share educational resources. While the Wikiwijs Project was primarily concerned with creating an infrastructure for Open Educational Resources (OER), it also clearly demonstrated the commitment of the Dutch government to realising a clearly defined and realistic approach to incorporating ICT into schools. However, even with all of the provision and support put in place not all teachers availed of the resources [8]. Looking back at the project Schuwer stated that one of the lessons learned from the project was that “more communication would have been helpful ... to be persuasive in nature to convince various parties (school management, teachers, and so on) about the benefits and role that Open Educational Resources can have regarding educational reform and in acquiring 21st century skills”. Another outcome of the Wikiwijs project was that it was recognised that the project by itself was not enough to realise the objectives set by the government. Schuwer also stated that “More prescriptive policies and regulations were also needed to avoid the current state of permissiveness on adopting an OER policy by educational organizations.” In 2015 Schuwer and Wild declared that the pioneering phase of such projects had come to an end and that the impact of such projects can now be analysed in order to identify the impediments to large-scale adoption of open education. In 2021 we are still not seeing OERs exploited to their full potential as many teachers are still largely unaware of what is available for their specific subjects [9]. We need a campaign to raise awareness of the available subject specific OERs for school communities. We have had the beginnings of such activity during Covid-19.

3. Impact of Covid-19

We must consider what lessons have been learned from the pandemic. The global pandemic accelerated the need for digital resources and particularly Open Educational Resources.

In 2020 as the COVID-19 pandemic forced the physical closure of schools by April 2020 they were close to 1.6 billion children and youth out of school. Some countries (e.g. UK and France) had early successes of the pivot to online largely due to having access to high quality digital resources. Some countries experienced more problems as the Digital Divide remains a problem. Many stakeholders in education including teachers and companies supported one another online through sharing their recommendations and opening access to their resources during the physical school closures. In Ireland Scoilnet compiled a list to highlight the Open Access resources available during the physical school closures and the community also requested that teachers make recommendations of available open resources and upload these to the Scoilnet portal for teachers and students to access.

For school communities one positive aspect in the wake of Covid-19 has been the abundance of high quality digital resources that have been made available, at no charge, to students and teachers.

In March a group of Irish publishers and the Irish Writers Union agreed to waive licence fees for selected books online. There are further initiatives from some educational publishers to allow parents access to an online home school hub from September 2020. However, this level of generosity is not sustainable. If we want high quality Open resources we can't rely on the good will of either individuals or publishers. And there are other considerations. In order to comply with European legislation passed in 2019, public sector organisations and private companies and organisations need to check the accessibility of their websites, mobile apps, and media content. The publishing sector must also adhere to these common accessibility standards ensuring that digital content can be used by all. High quality digital materials need to be designed and developed and this requires professional time and resources. We cannot expect this to happen without cost.

What support is needed for Open Education Practices in a Post Covid World?

What are the recommendations?

- We can say that Open must be supported by governments in a more visible manner.
- Open must be promoted at the stage of Initial Teacher Education.

The global Directory of Open Access Repositories is an organisation that hosts repositories that provide free, open access to academic outputs and resources. Each repository record within Open



DOAR has been carefully reviewed and processed by a member of the editorial team and so it is a trusted service for the community. Another example of successful digital resources project is the open discovery space project. This project has been assisting schools progress from the early stage of ICT and E learning integration in teaching and learning to becoming what is turned an E-mature school. In 2014 the ODS project had 700 affiliated schools now in 2021 there are more than 2600 schools involved with the project. We cannot expect teachers to take on the additional role of the design and development of high quality digital content. We need targeted funding to populate our national repository as was done in the early stages of Scoilnet. The capacity for a repository service has been proven in the context of third level education. For a short few years we had a successful national repository in the National Digital Learning Resources (NDLR) service [10]. This service was established as a collaborative pilot service project in 2004 largely by the university sector. By 2006, the NDLR had grown considerably as 21 of the Irish institutions of higher education became involved. By 2010, many members were registering from organisations outside of the 21 main institutions of higher education in Ireland. These organisations included other educational institutions and bodies in the wider public sector. However, the repository service was shut down at the end of 2012.

5. Conclusion

At a national level there is clearly a need to go beyond highlighting the availability of Open Educational Resources in official Department of Education circulars. Despite the challenges, Covid-19 provides us with an opportunity to look at future school policy and investment in digital teaching and learning projects. There have been many surveys conducted online in the last few months which have looked at the impact of Covid-19 on second-level education [12]. It is clear that there is a long way to go before every classroom sees students availing of the technology to transform their learning. However, schools should look at this as an opportunity to identify appropriate resources from the many internationally funded open educational repositories. Teachers could also look to repurpose what they can and integrate these digital teaching materials into their own classroom to enhance the teaching and learning environment as Hamilton advocates [13] we must encourage an evolving personalized digital learning environment in which all stakeholders including policy makers administrators teachers and students collaborate to create a future of renegotiated core competencies but this is unlikely to happen without a national policy advocating for the use of Open Educational Resources.

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